

Appl. No. 10/707,162
Amdt. Dated Sep. 28, 2005
Reply to Office Action of June 28, 2005

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A light guide module for a backlight module, comprising:

a light guide pipe having a light emitting surface, and a light incident surface orthogonal to the light emitting surface; and

a dot-web located on a surface of the light guide pipe opposite to the light emitting surface and on a surface of the light guide pipe opposite to the light incident surface; and

a light diffusion arrangement deployed on the light emitting surface, the light diffusion arrangement including organic scattering balls homogenously mixed within a bonding agent.

Claim 2 (original): The light guide module as recited in claim 1, wherein a grain size of the organic scattering balls ranges from 10 to 15 micrometers.

Claim 3 (currently amended): The light guide module as recited in claim 1, wherein ~~[[the]]~~ a material for making of the organic scattering ball is balls comprises items selected from ~~[[a]]~~ the group consisting of Polymethyl Methacrylate, Polycarbonate, and Methallocene Cyclic Olefin

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Copolymer.

Claim 4 (original): The light guide module as recited in claim 1, wherein the bonding agent is acrylic bonding agent.

Claim 5 (original): The light guide module as recited in claim 1, wherein the scattering balls are homogenously distributed over the light emitting surface.

Claim 6 (currently amended): The light guide module as recited in claim 1, wherein a density of the scattering balls becomes greater as a distance from the incident surface becomes greater.

Claims 7-8 (canceled)

Claim 9 (currently amended): The light guide module as recited in claim [[7]] 1, wherein a density of the dot-web increases as a distance from the light incident surface increases.

Claim 10 (currently amended): The light guide module as recited in claim 1, wherein the light incident surface and the light emitting surface are arranged to adjoin one another.

Claim 11 (currently amended): A ~~back-light~~ backlight module, comprising:
a light pipe module having a light emitting surface, and a light incident surface angled with regard to the light emitting surface;
a dot-web located on a surface of the light pipe module opposite to the light emitting surface and on a surface of the light pipe module opposite to the light incident surface;

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a light diffusion arrangement integrally formed on the light emitting surface, the light diffusion arrangement including organic scattering balls homogenously mixed within a bonding agent; and
at least a light source arranged adjacent the light incident surface.

Claim 12 (currently amended): The ~~back light~~ backlight module as recited in claim 11, wherein ~~[[a]] the~~ dot-web formed on the surface of the light pipe module opposite to the light emitting surface is made from highly refractive diffusion material, is formed on another surface of the light pipe module opposite to said light emitting surface.

Claim 13 (currently amended): A method for making a light guide module, comprising the steps of:

providing a light pipe comprising a light incident surface and a light emitting surface, and further comprising a dot-web located on a surface opposite to the light emitting surface and on a surface opposite to the light incident surface;

providing organic scattering balls mixed with bonding agent to form a mixture; and

spreading the mixture over the light emitting surface of the light ~~guide~~ pipe.

Claim 14 (currently amended): The method as recited in claim 13, further comprising ~~[[a]] the~~ step of forming a dot-web arrangement over a different surface of the light pipe.